

### Remarks/Arguments

The Examiner has rejected claims 1 on the ground of nonstatutory obviousness-type double patenting as being obvious over claim 20 of US Patent No. 7,189,269. The rejection is traversed for the following reason.

The Examiner states that “they are not patentably distinct from each other because the patent claims a process for preparing a fuel composition comprising the step of blending a Fischer-Tropsch derived gas oil, an oxygenate, and a base fuel which may be a petroleum derived gas oil . . . .”

Applicants claim a method of increasing the cetane number of a gas oil product based on petroleum derived gas oil to a target cetane number Y wherein the volume amount of added Fischer-Tropsch derived gas oil is less than the volume amount which would be added if linear blending is assumed. This is a very specific method of increasing the cetane number of a gas oil product which involves adding less than a particular amount of Fischer-Tropsch derived gas oil. The cited prior art document does not teach this to the skilled person.

Accordingly, Applicants respectfully request withdrawal of the nonstatutory obviousness-type double patenting rejection.

The Examiner has rejected claims 1-8 under 35 USC 103(a) as being obvious over US6,056,792 (Suppes et al.) and US6,663,767 (Berlowitz et al) considered separately. The rejection is respectfully traversed for the following reasons

The invention relates to a method of increasing the cetane number of a gas oil product based on a petroleum derived gas oil to a target cetane number Y comprising: adding to the petroleum derived gas oil a volume amount of a Fischer-Tropsch derived gas oil having a higher cetane number, B, than the petroleum derived gas oil of cetane number, A, wherein the volume amount of added Fischer-Tropsch derived gas oil is less than the volume amount which would be added if linear blending is assumed. Further, the invention relates to a method wherein the volume fraction of Fischer-Tropsch gas oil is less than x, wherein x is the volume fraction that would be added if linear blending assumptions would have been made according to the following equation:

$$Y = A + x(B-A),$$

Berlowitz describes a blend of a Fischer-Tropsch derived diesel fuel and a conventional diesel fuel that provides better than expected emissions and a reduced sulfur content. (see abstract

and column 2, lines 16-21). However, although cetane number is mentioned (see column 2 lines 41), there is no discussion of any relationship between it and the concentration of components. Berlowitz does not teach applicants claimed invention which is a very specific method of increasing the cetane number of a gas oil product which involves adding less than a particular amount of Fischer-Tropsch derived gas oil. Berlowitz document does not teach this to the skilled person in the art.

Suppes discloses a composition which may comprises Fischer-Tropsch derived crude and a blending stock. Examiner states that it "teaches that the blend results in an improvement in one or more desirable fuel properties including, but not limited to, pour point temperature, viscosity and emulsion generated during combustion in a diesel engine. However, at column 19, lines 58 to 59 it states *"The biodiesel mixtures showed an almost linear impact of concentration on cetane number."* Furthermore, at column 19, lines 61 to 63, it is stated that the biodiesel increased the cetane number. Thus, there is no indication that the syncrude increased the cetane number, particularly non-linearly.

Accordingly, Applicants respectfully request withdrawal of the 103 rejections.

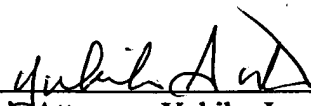
## **CONCLUSION**

Applicants respectfully request consideration and allowance of the pending claims. The Commissioner is authorized to charge fees in connection with this response to Deposit Account No. **19-1800 (File no. TS7609)**, maintained by Shell Oil Company. The Examiner is respectfully requested to reexamine the claims and pass the case to issue. If it would be considered helpful in resolving any issues in the case, the Examiner is encouraged to contact the undersigned at the number below.

Respectfully submitted,

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